

## TENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>8317-129-228</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 02/ 03233</b>	International filing date (day/month/year) <b>28/01/2002</b>	(Earliest) Priority Date (day/month/year)
Applicant  <b>EKC TECHNOLOGY, INC.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☒ Unity of invention is lacking (see Box II).

## 4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

## 5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

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☐ None of the figures.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 02/03233

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-23, 75-78 (in part)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-23,75-78 (in part)

Foam composition comprising a fluoride compound, a solvent, a gas, a surfactant and water.

2. Claims: 24-62,68-74,75-78 (in part)

Foam composition comprising an amine, a solvent, a gas and a surfactant.

3. Claims: 62-67,75-78 (in part)

A foam composition comprising periodic acid, a gas, a surfactant and deionised water.

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C11D3/02 C11D3/43 C11D3/20

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C11D B08B B01F G03F H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 235 693 B1 (CHENG JUN ET AL) 22 May 2001 (2001-05-22) cited in the application column 6, line 12 - line 31; claims 1-14; table 1 ---	1-4,6,7, 15-23, 75-78
Y	WO 01 27986 A (GEBRÜDER DECKER GMBH & CO KG) 19 April 2001 (2001-04-19)  page 9, line 26 -page 10, line 9; claims 1,3-6 ---	1-4,6,7, 15-23, 75-78
A	US 6 248 704 B1 (CHENG JUN ET AL) 19 June 2001 (2001-06-19) cited in the application claims 1-7; table 1 --- -/--	1,3-14, 22,23, 75-78

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

1 November 2002

Date of mailing of the international search report

17. 04 2003

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# INT NATIONAL SEARCH REPORT

International Application No

PC 02/03233

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 672 577 A (LEE WAI MUN) 30 September 1997 (1997-09-30) cited in the application claim 1; table 1 ---	1,6,13, 14,23, 75,77,78
A	WO 92 04942 A (ATLANTIC RICHFIELD CO) 2 April 1992 (1992-04-02) page 2, paragraph 3; claim 1 -----	1-3,22, 23,75

# INT NATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT 02/03233

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6235693	B1	22-05-2001	AU 6348600 A EP 1212150 A1 JP 2003507901 T WO 0105524 A1	05-02-2001 12-06-2002 25-02-2003 25-01-2001
WO 0127986	A	19-04-2001	AU 1024301 A DE 10050636 A1 WO 0127986 A1	23-04-2001 19-04-2001 19-04-2001
US 6248704	B1	19-06-2001	AU 4980300 A EP 1177275 A1 JP 2002543272 T WO 0066697 A1	17-11-2000 06-02-2002 17-12-2002 09-11-2000
US 5672577	A	30-09-1997	US 5482566 A US 5334332 A US 5279771 A US 6000411 A US 6140287 A US 6242400 B1 US 5902780 A US 6121217 A EP 0578507 A2 JP 3048207 B2 JP 6266119 A JP 3150306 B2 JP 11194505 A KR 9707328 B1 US 2003032567 A1 US 2002183219 A1 US 6319885 B1 US 6187730 B1 US 6367486 B1 US 6221818 B1 US 6110881 A US 6276372 B1 US 5911835 A US 2001006936 A1 US 2002052301 A1 AT 176337 T DE 69130823 D1 DE 69130823 T2 DK 485161 T3 EP 0485161 A1 ES 2129403 T3 GR 3030070 T3 JP 2691952 B2 JP 4289866 A US 5381807 A	09-01-1996 02-08-1994 18-01-1994 14-12-1999 31-10-2000 05-06-2001 11-05-1999 19-09-2000 12-01-1994 05-06-2000 22-09-1994 26-03-2001 21-07-1999 07-05-1997 13-02-2003 05-12-2002 20-11-2001 13-02-2001 09-04-2002 24-04-2001 29-08-2000 21-08-2001 15-06-1999 05-07-2001 02-05-2002 15-02-1999 11-03-1999 09-09-1999 13-09-1999 13-05-1992 16-06-1999 30-07-1999 17-12-1997 14-10-1992 17-01-1995
WO 9204942	A	02-04-1992	WO 9204942 A1 US 5296164 A US 5434192 A	02-04-1992 22-03-1994 18-07-1995